

### You should be able to:

- Determine if a dewatering operation is required
- Determine if a permit is required
- Understand the Contractor's and the Department's roles and responsibilities
- Understand the process for dewatering under the Caltrans and RWQCB permits
- Determine if the Contractor is in compliance
- Determine the appropriateness of dewatering treatment technologies

# What is a Dewatering Operation?

 Practices that manage the discharge when non-stormwater or accumulated precipitation must be removed from a work location





# **Is a Dewatering Operation Required?**

- Do you have water on the project...
  - ...that has been standing for 72 hours or more and needs to be removed for vector control?
  - ...that needs to be removed by the Contractor for construction to proceed?



# Is an NPDES Permit Required?

- Is it stormwater or non-stormwater?
- Where is the effluent being discharged?
- Where is the project located?
- What is the daily volume of water and duration?
- Is the effluent polluted with sediment or other pollutants?



# **Types of Dewatering Operations**

- There are three types of dewatering operations:
  - Operations <u>NOT</u> regulated under an NPDES Permit
  - Operations regulated under the Caltrans
     Statewide NPDES Permit
  - Operations regulated under a local RWQCB
     NPDES Permit



# **Assess Water Quality**

- Is there reason to suspect pollutant other than sediment?
- Sight and odor test

### **Estimate Discharge Parameters**

- Is the water from groundwater, cofferdam, accumulated precipitation?
- What is the daily flow rate, duration, and total volume?

# Manage Water with Pollutants Other than Sediment

- Additional testing and evaluation are typically required
- Contact your CSWC for assistance



# **Types of Dewatering Operations**

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  - Operations regulated under a local RWQCB
     NPDES Permit



# Dewatering effluent cannot be discharged to a storm drain or water body at any time during the operation!



# **Types of Dewatering Operations**

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     NPDES Permit



# Key Qualification: NPDES Permit

A dewatering operation is regulated by an NPDES

Permit if any effluent will discharge to a surface

water or a storm drain that discharges to a

surface water



# Which NPDES Permit Regulates the Operation: Caltrans or RWQCB?

- Depends on:
  - RWQCB with jurisdiction over project
  - Source of effluent: Stormwater or nonstormwater
  - Water quality: Unpolluted, polluted by sediment only, or contains pollutants other than sediment
  - Discharge Parameters: Flow rate, daily volume, duration



### District 1 **RWQCB NPDES Permit Summary RWQCB Caltrans District 1** Type of Dewatering Discharge Central Valley North Coast Unpolluted or Sediment as Only Pollutant RWQCB Caltrans Statewide Storm Water RWQCB Permit RWQCB Pollutant Other Than Sediment Unpolluted and Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year) RWQCB Caltrans Statewide Permit Non-Storm Water and Storm Water Mixed with Other Water Polluted or More than 250,000 Gallons/Day (24-hour day) or Longer Than 4 Months Duration (in Calendar Permit

	Caltra	ans District 2		RWQCB	
	Type of Dev	vatering Discharge	1 North Coast	5 Central Valley	6 Lahontan
Storm Water	Unpolluted o	r Sediment as Only Pollutant	RWQCB Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
Pollutan	Pollutant Oth	ner Than Sediment	RWQCB Permit	RWQCB Permit	RWQCB Permit
Non-Storm	Unpolluted	No Volume or Duration Limits	RWQCB Permit		RWQCB Permit
		Less Than 250,000 Gallons/Day (24- hr/day) and Less Than 4 Months Duration (in Calendar Year)		Caltrans Statewide Permit	
Water and Storm Water Mixed with Other Water		More Than 250,000 Gallons/Day (24- hr/day) or More Than 4 Months Duration		RWQCB Permit	
	Polluted	No Volume or Duration Limits	RWQCB Permit	RWQCB Permit	RWQCB Permit

	Caltra	ans District 3		RWQCB	
	Type of Dev	vatering Discharge	1 North Coast	5 Central Valley	6 Lahontan
Storm Water	Unpolluted o	or Sediment as Only Pollutant	RWQCB Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
	Pollutant Other Than Sediment		RWQCB Permit	RWQCB Permit	RWQCB Permit
Non-Storm Water and Storm Water		No Volume or Duration Limits	RWQCB Permit		RWQCB Permit
	Unpolluted	Less Than 250,000 Gallons/Day (24-hr/day) and Less Than 4 Months Duration (in Calendar Year)		Caltrans Statewide Permit	
Mixed with Other Water		More Than 250,000 Gallons/Day (24-hr/day) or More Than 4 Months Duration		RWQCB Permit	
	Polluted	No Volume or Duration Limits	RWQCB Permit	RWQCB Permit	RWQCB Permit

Cal	trans District 4	RWQCB			
Type of D	ewatering Discharge	1 North Coast	2 San Francisco <sup>A</sup>	3 Central Coast	5 Central Valley
Storm Water	Unpolluted or Sediment as Only Pollutant	RWQCB Permit	Permission or RWQCB Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
	Pollutant Other Than Sediment	RWQCB Permit	RWQCB Permit	RWQCB Permit	RWQCB Permit
Non-Storm Water and Storm Water Mixed with Other Water	Unpolluted and Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year)	RWQCB Permit	Permission or RWQCB Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
	Polluted or More than 250,000 Gallons/Day (24-hr day) or Longer Than 4 Months Duration (in Calendar Year)	RWQCB Permit	RWQCB Permit	RWQCB Permit	RWQCB Permit

Calt	rans District 5		RWQCB	
Type of Do	ewatering Discharge	2 San Francisco <sup>A</sup> Central Coast		
100 - 100 oc	Unpolluted or Sediment as Only Pollutant	Permission or RWQCB Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
Storm Water	Pollutant Other Than Sediment	RWQCB Permit	RWQCB Permit	RWQCB Permit
Non-Storm Water or Storm Water Mixed with Other Water	Unpolluted and Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year)	Permission or RWQCB Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
	Polluted or More than 250,000 Gallons/Day (24-hr day) or Longer Than 4 Months Duration (in Calendar Year)	RWQCB Permit	RWQCB Permit	RWQCB Permit

	Dis	trict 6	RWG	СВ
Ту	pe of Dewa	tering Discharge	5 Central Valley	6 Lahontan
	Unpolluted or Sediment as Only Pollutant		Caltrans Statewide Permit	Caltrans Statewide Permit
Storm Water	Pollutant Other Than Sediment		RWQCB Permit	RWQCB Permit
Non-Storm Water or Storm Water		No Volume or Duration Limits		RWQCB Permit
	Unpolluted	Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year)	Caltrans Statewide Permit	
Mixed with Other Water		More than 250,000 Gallons/Day (24-hr day) or Longer Than 4 Months Duration (in Calendar Year)	RWQCB Permit	
	Polluted	No Volume or Duration Limits	RWQCB Permit	RWQCB Permit

1	Caltrans Di	strict 7		RW	рсв	
Туре с	of Dewaterin	ng Discharge	3 Central Coast	4 Los Angeles	5 Central Valley	6 Lahontan
Storm Water	Unpolluted or Sediment as Only Pollutant		Caltrans Statewide Permit	Caltrans Statewide Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
	Pollutant Other Than Sediment		RWQ CB Permit	RWQCB Permit	RWQCB Permit	RWQ CB Permit
Non-Storm Water		No Volume or Duration Limits		RWQCB Permit		RWQ CB Permit
	Unpolluted	Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year)	Caltrans Statewide Permit		Caltrans Statewide Permit	
and Storm Water Mixed with Other Water		More than 250,000 Gallons/Day (24-hr day) or Longer Than 4 Months Duration (in Calendar Year)	RWQCB Permit		RWQCB Permit	
	Polluted	No Volume or Duration Limits	RWQCB Permit	RWQCB Permit	RWQCB Permit	RWQ CB Permit

	Caltrans [	District 8		RWC		mary
Туј	oe of Dewater	ring Discharge	6 Lahontan	7 Colorado River	8 Santa Ana	9 San Diego
Storm Water	Unpolluted or	Sediment as Only Pollutant	Caltrans Statewide Permit	Caltrans Statewide Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
	Pollutant Oth	er Than Sediment	RWQCB Permit	RWQCB Permit	RWQCB Permit	RWQCB Permit
Groundwater	Discharge to other than San Diego Bay or Storm Conveyances or Tributaries Thereto: Unpolluted and Less Than 100,000 Gallons/Day (24-hr day)					RWQCB Permit
	Discharge to other than San Diego Bay or Storm Conveyances or Tributaries Thereto: Unpolluted and Greater Than 100,000 Gallons:Day (24-In day) or Polluted and Less Than 100,000 Gallons:Day (24-In day)					RWQCB Permit
	Discharge to San Diego Bay or to Storm Conveyances or Tributaries Thereto					RWQCB Perm
		No Volume or Duration Limits	RWQCB Permit			Contact RWQCB
Non-Storm Water and Storm Water	Unpolluted	Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year)		Caltrans Statewide Permit	RWQCB Permit	
Mixed with Other Water		More than 250,000 Gallons/Day (24- hr day) or Longer Than 4 Months Duration (in Calendar Year)		RWQCB Permit	RWQCB Permit	
	Polluted	No Volume or Duration Limits	RWQCB Permit	RWQCB Permit	RWQCB Permit	Contact RWQCB

Caltr	rans District 9	RWQCB
Type of De	watering Discharge	6 Lahontan
	Unpolluted or Sediment as Only Pollutant	Caltrans Statewide Permit
Storm Water	Pollutant Other Than Sediment	RWQCB Permit
Non-Storm Water and Storm	Unpolluted	RWQCB Permit
Water Mixed with Other Water	Polluted	RWQCB Permit

	Caltrans [	District 10		RWQCB	
Туі	oe of Dewate	ring Discharge	2 San Francisco A	5 Central Vallev	6 Lahontan
Storm Water	Unpolluted or Sediment as Only Pollutant		RWQCB Permit	Caltrans Statewide Permit	Caltrans Statewide Permit
	Pollutant Other Than Sediment		RWQCB Permit	RWQCB Permit	RWQCB Permit
Non-Storm Water		No Volume or Duration Limits			RWQCB Permit
	Unpolluted	Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year)	RWQCB Permit	Caltrans Statewide Permit	
Mixed with Other Water		More than 250,000 Gallons/Day (24-hr day) or Longer Than 4 Months Duration (in Calendar Year)	RWQCB Permit	RWQCB Permit	
	Polluted	No Volume or Duration Limits	RWQCB Permit	RWQCB Permit	RWQCB Permit

	Caltrans District 11	RW	QCB	
Тур	e of Dewatering Discharge	7 Colorado River	9 San Diego	
THE RESIDENCE OF THE PERSON OF	Unpolluted or Sediment as Only Pollutant	Caltrans Statewide Permit	Caltrans Statewide Permit	
Storm Water	Pollutant Other Than Sediment	RWQCB Permit	Contact RWQCB	
Groundwater	Discharge to other than San Diego Bay or Storm Conveyances or Tributaries Thereto: Unpolluted and Less Than 100,000 Gallons/Day (24-hr day)		RWQCB Permit	
	Discharge to other than San Diego Bay or Storm Conveyances or Tributaries Thereto: Unpolluted and Greater Than 100,000 Gallons/Day (24-hr day) or Polluted and Less Than 100,000 Gallons/Day (24-hr day)		RWQCB Permit	
	Discharge to San Diego Bay or to Storm Conveyances or Tributaries Thereto		RWQCB Permit	
Non-Storm Water and Storm Water Mixed with Other Water	Unpolluted and Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year)	Caltrans Statewide Permit	Contact RWQCB	
	Polluted or More Than 250,000 Gallons/Day (24- hr day) and <sub>More</sub> Than 4 Months Duration (in Calendar Year)	RWQCB Permit	Contact RWQCB	

# District 12 RWQCB NPDES Permit Summary Caltrans District 12 Type of Dewatering Discharge RWOCB Santia Ana San Diego

	Caltrans District 12	RWO	СВ	
Тур	e of Dewatering Discharge	8 Santa Ana	g San Diego	
	Unpolluted or Sediment as Only Pollutant	Caltrans Statewide Permit	Caltrans Statewide Permit	
Storm Water	Pollutant Other Than Sediment	RWQCB Permit	Contact RWQCB	
	Discharge to other than San Diego Bay or Storm Conveyances or Tributaries Thereto: Unpolluted and Less Than 100,000 Gallons/Day (24-hr day)		RWQCB Permit	
Groundwater	Discharge to other than San Diego Bay or Storm Conveyances or Tributaries Thereto: Unpolluted and Greater Than 100,000 Gallons/Day (24-hr day) or Polluted and Less Than 100,000 Gallons/Day (24-hr day)		RWQCB Permit	
	Discharge to San Diego Bay or to Storm Conveyances or Tributaries Thereto		RWQCB Permit	
Non-Storm Water and Storm Water Mixed with	Unpolluted and Less Than 250,000 Gallons/Day (24-hr day) and Less Than 4 Months Duration (in Calendar Year)	RWQCB Permit	Contact RWQCB	
Other Water	Polluted or More Than 250,000 Gallons/Day (24-hr day) and <sub>More</sub> Than 4 Months Duration (in Calendar Year)	RWQCB Permit	Contact RWQCB	

Note: Blacked out boxes are when Regional Board does not specify situation.



# Dewatering under Caltrans Permit General Information

- Stormwater in all RWQCB Regions except 1 and 2
- Qualifying non-stormwater in RWQCB Regions 3,
   5, and 7 (volume and duration limits)
- Must be free of pollutants other than sediment
- May require treatment for sediment removal prior to discharge



# Dewatering under Caltrans Permit General Process

- Notify RWQCB (through your CSWC) if nonstormwater (Applicable for RWQCBs 7 & 9 only)
- Amend SWPPP/ WPCP if necessary (See 07-347)
- Treat to remove sediment if not 'visibly clear'
- Monitor dewatering operations using the Dewatering Operations Monitoring Form (sample provided in revised NS-2 BMP available on Caltrans website)



# **Types of Dewatering Operations**

- There are three types of dewatering operations:
  - Operations **NOT** regulated under an NPDES Permit
  - Operations regulated under the Caltrans Statewide NPDES Permit
  - Operations regulated under a local RWQCB NPDES
     Permit



# **Dewatering Under RWQCB NPDES Permit**

- Required for dewatering discharge to storm drain or water body that is not allowed by the RWQCB under the Caltrans Permit
- Water Quality Limits
  - Must meet permit requirements
  - Pollutants other than sediment may be allowed, but treatment will be required



### Dewatering Under RWQCB NPDES Permit

- May be discharged directly from the project site
- Appropriate for small or large volumes of water
- Minimal cost
- RWQCB permit may require several weeks to several months to obtain
- Treatment may be needed to meet water quality requirements
- Analytical testing, monitoring and reporting is required



### **RWQCB General NPDES Permits** General Permit for Dewatering by Caltrans Districts The RWQCB may Regional Water Quality Control Board (RWQCB) Det Region 1 - Order No. R1.:2009.0045 have issued a Region 1 - Oxfort No. RE.3.000.0015 Region 1 - Oxfort No. RE.3.000.0015 Region 1 - Oxfort No. RE.3.000.0016 Region 1 - Oxfort No. RE.3.000.0016 Region 2 - Oxfort No. RE.3.000.0013 Region 3 - Oxfort No. RE.3.000.0013 Region 4 - Oxfort No. RE.3.000.0013 Region 6 - Oxfort No. RE.3.000.0013 Region 0 - Oxfort No. RE.3.000.0013 Region 1 - Oxfort No. RE.3.000.0013 Region 1 - Oxfort No. RE.3.000.0013 Region 2 - Oxfort No. RE.3.000.0013 Region 3 - Oxfort No. RE.3.000.0010, Oxfort No. R.3.2000.0063 general permit that covers dewatering operations Region 5 - Order No. R5-2008-0081 Region 2 - Order No. R2-2007-0033 0010. Order No. R3-2006-0063 If the general Region 6 - Order No. R6T-2008-0023 Region 3 - Resolution No. R3-2008-0010, Order No. R3-2006-0063

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permit does not cover your particular type of operation, a sitespecific permit may be required

Region - No General Dewnsteing Penuri 50 Fat, but will require after November 2009.

Region 9 - Order No. B-2000-0002, Be-2007-0034

Region 9 - Order No. B-2000-0002, Be-2007-0034

Region 9 - Order No. B-2000-0002, B-2007-0034, B-2009-0003, R-2006-0065

Region 9 - Order No. B-2009-0002, B-2007-0034

Statemack - Water Quality Order 2003-0003

Statemack - Water Statemack Sorans (witer Penuils-Cal Trans 99-04-DWQ)

Statemack - Profess Statemack Sorans (witer Penuils-Cal Trans 99-04-DWQ)

Statemack - General Penuir for Storan Water Discharges Associated with Construction Activities Caltrans

# **RWQCB Permits – Major Elements**

- **Permit Provisions**
- **Waste Discharge Requirements** 
  - **Discharge Prohibitions**
  - Effluent Limitations numeric and narrative
  - Receiving Water Limitations numeric and narrative
- **Monitoring and Reporting Program**



# **RWQCB Permits**

- Where are the Permit Provisions?
- Where are the Waste Discharge Requirements?
  - Discharge Prohibitions?
  - Effluent Limitations numeric and narrative?
  - Receiving Water Limitations numeric and narrative?
- Where are the Monitoring and Reporting Program Requirements?



# What are the Contractor's Responsibilities?

- Conduct the dewatering operation
- Select the means and methods to perform the operation unless otherwise specified in the contract documents
- Comply with the contract documents



# What are Department's Responsibilities?

- Ensure that the contractor is in compliance with NPDES permit requirements
- On Caltrans Construction contract sites, the Department is responsible for obtaining the NPDES permits needed
- Encroachment Permit Projects, the Department is responsible for assuring compliance with Caltrans requirements within Caltrans right of way

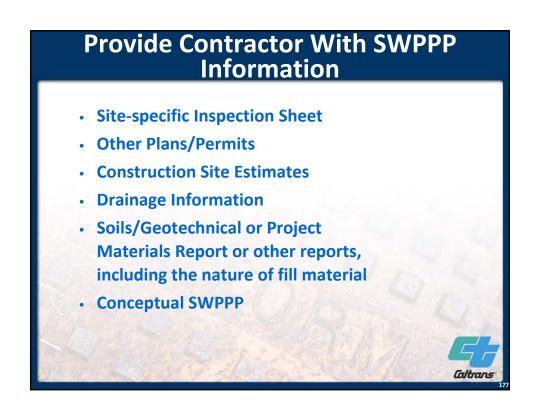


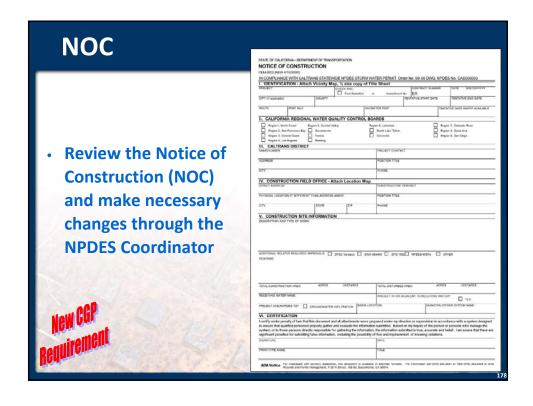
# **Course Highlights**

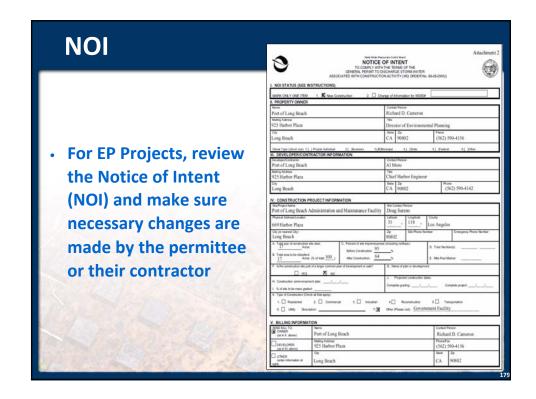
- Pollutant sources, potential impacts and Regulation Refresher
- Best Management Practices Refresher
- Contract Administration for Water Pollution, SWPPP Review, Inspection and Maintenance, and Sampling and Analysis Refresher



# Provide Contractor With SWPPP Information From Information Handout: Vicinity Map Pre-Construction (Existing) Stormwater Control Practices (BMPs) Permanent (Post-Construction) Stormwater Control Measures (BMPs) Layout Sheets Showing BMP Locations Explanation of (Temporary) BMPs Copy of Notice of Construction (NOC)/Notice of Intent (NOI)



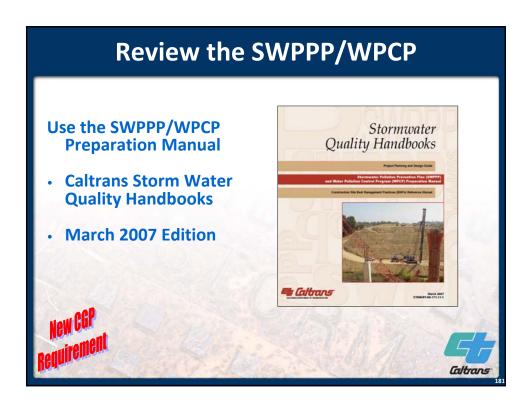


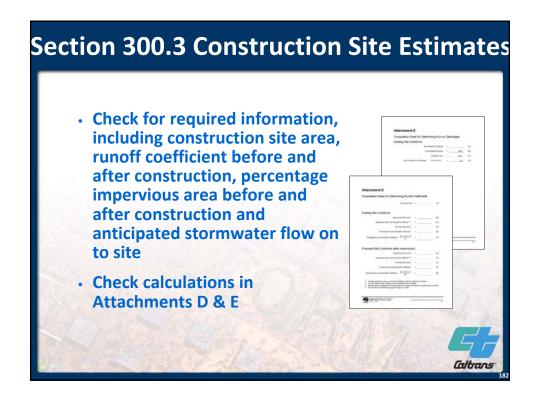


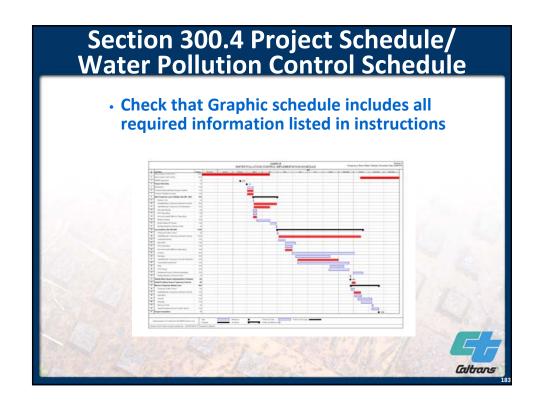
# **Other Plans and Permits**

- Army Corps 404
- RWQCB 401 Certification
- Department of Fish and Game 1602
- Dewatering permits
- · Make sure they will not expire during project
- Make sure that construction activities have not changed since application was sent in – the permit application may need to be resubmitted

Caltrans



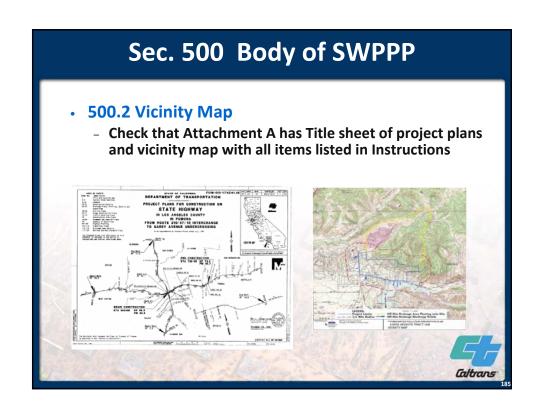


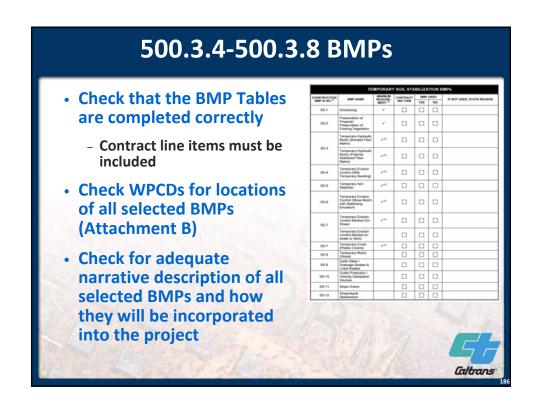


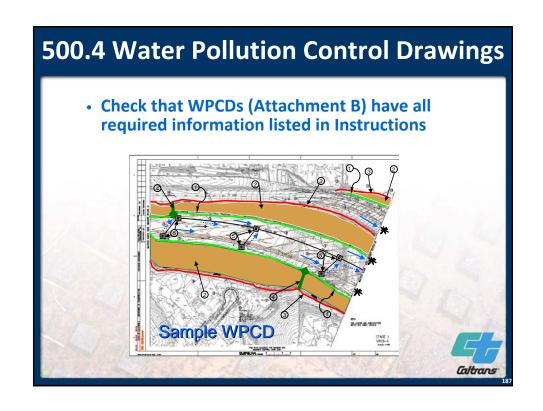
# Sec. 400 References, Other Plans, Permits, and Agreements

- Check that all Documents Referenced in the SWPPP are listed
- Copies of the Caltrans (CAS000003) and General Construction (CAS000002) permits must be attached to the SWPPP
- All referenced materials not attached to SWPPP must be kept on-site and be readily available for review

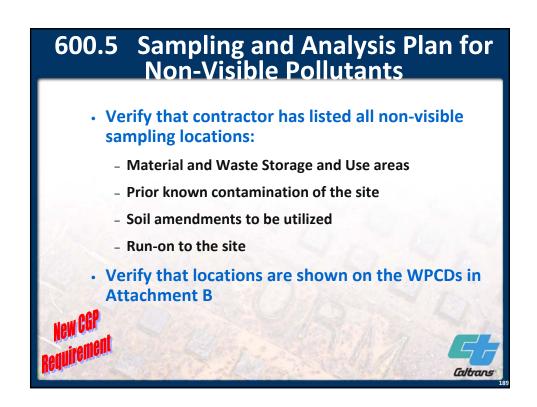












# **600.5.4** Analytical Constituents

 Verify that contractor has completed Table 600-3 and identified specific sources and types of potential non-visible pollutants on site

Potential Non-Vi	Table 600-3 (Ex sible Pollutants and Wat	cample) er Quality Indicator Constituents
Pollutant Source	Pollutant	Water Quality Indicator Constituent
Vehicle Batteries	Lead, Sulfate, Acid	Lead, sulfate or pH



# **Pre Construction Meeting**

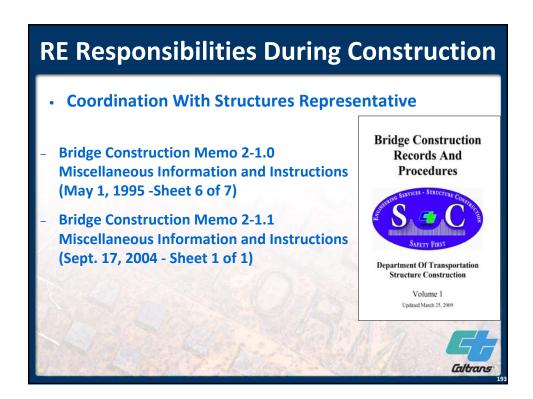
- Who should attend?
  - RE
  - Contractor's Superintendent
  - Contractor's Water Pollution Control Manager (WPCM)
  - Contractor's SWPPP Preparer
  - Appointed CT SWPPP Inspector
  - CSWC
  - RWQCB Representative (Invitation required to meeting with contractor)
- Water pollution control meeting can be integrated into the pre-construction meeting with the contractor, but not recommended



# **Pre Construction Meeting**

- Discuss project-specific water pollution control issues
  - Other plans and permits
  - Environmentally sensitive areas
  - Coordination of Special Provision requirements
  - The conceptual SWPPP (if applicable)
  - RE Pending File information





# **RE Responsibilities During Construction**

### **Bridge Construction Memo 2-1.0**

11. Dealing With Agencies Such as Corps of Engineers, Reclamation Board, Flood Control Districts, or Coast Guard: This is the basic responsibility of the Resident Engineer. However, since these agencies control waterways and it will generally be structure work which is the subject of discussion, the Office of Structure Construction will provide any assistance which the Resident Engineer requests.



### **RE Responsibilities During Construction**

### **Bridge Construction Memo 2-1.1**

Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP)

Administration is the responsibility of the Resident Engineer. Office of Structure Construction personnel will assist the Resident Engineer in the administration of SWPPP/WPCP for structure related work.



# **Contract Special Provisions**

- Section 10-1. Water Pollution Control
- Issued to satisfy the NPDES Permit requirements
- Requires use of the Storm Water Quality Handbooks
- Details water pollution control requirements
- Defines DSA limit
- Maintenance and Inspection







# **Contract Special Provisions**

- Identifies plan required (SWPPP or WPCP)
- · Identifies appropriate RWQCB
- The SWPPP/WPCP contents and approval process
- Additional required BMPs
- Year round requirements



# **Contract Special Provisions**

- Winter Shutdown (if applicable)
- Sampling and Analytical Requirements
- Move-In/Out for Temporary/Permanent Erosion
   Control
- 50/50 BMP Maintenance Sharing
- Progress Payments/Detention/Retention

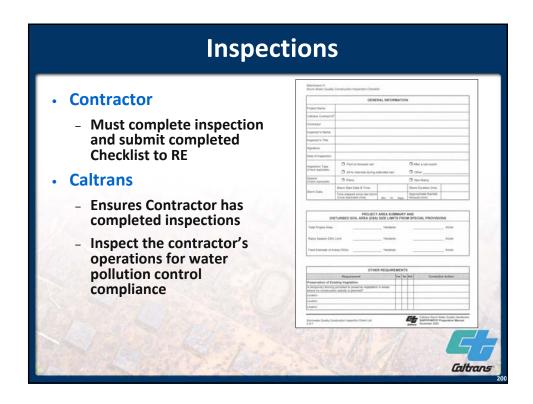


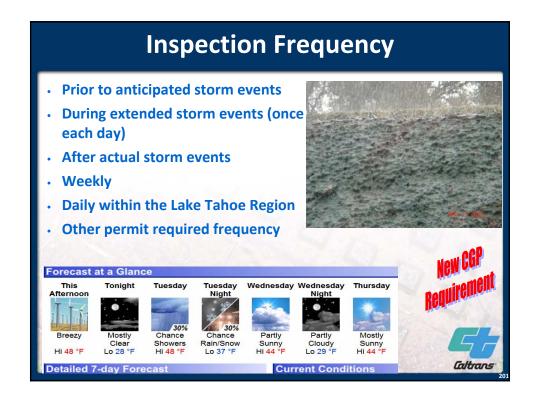
# No Work to Start Without Approved SWPPP/WPCP

- Contractor should not:
  - Move-in equipment or pollutant causing materials
  - Disturb soil areas
  - Track sediment onto adjacent roads









# **Before the Inspection**

- Review Special Provision 10-1.02 Water Pollution Control
  - What are the required BMPs for erosion, sediment and construction site management?
- Review the SWPPP or WPCP
  - Are their any relevant amendments?
  - Are their any Unique Site Features?
  - Does the Schedule callout adequate BMPs for erosion, sediment and construction site management?



# **Stormwater Inspection Tips**

- Take a copy of approved SWPPP on field inspection
- Use an inspection form
- Contractor should participate in inspection
- Inspect the entire site including the perimeter
- Start inspection from lowest point or from area where discharge possibility is the highest



# **Stormwater Inspection Tips**

- Walk interior and perimeter of Contractors yard
- Invite Structures Construction personnel
- Identify existing conditions
- Take photographs
- Identify changes in construction that may require amendments to the SWPPP or WPCP



# **Stormwater Inspection Tips**

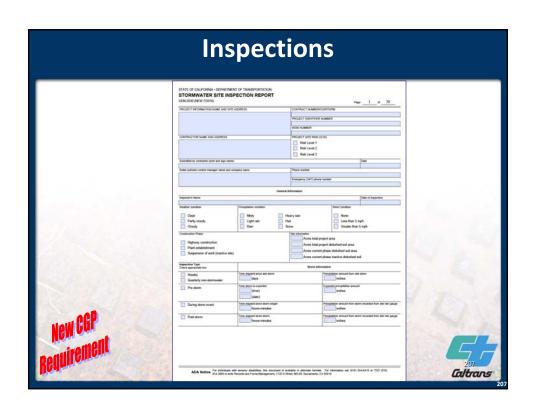
- What if contractor's yard is not within the ROW?
   Check with RE before entering
- The Caltrans Permit requires SWPPP to apply to all areas related to construction whether or not they are on the right-of-way
- The RE is responsible for:
  - Coordinating the inspection of offsite construction activities with the contractor
  - Communicating with the contractor and ensuring proper implementation and maintenance of BMPs
  - Ensuring proper compliance with the Permit and SWPPP

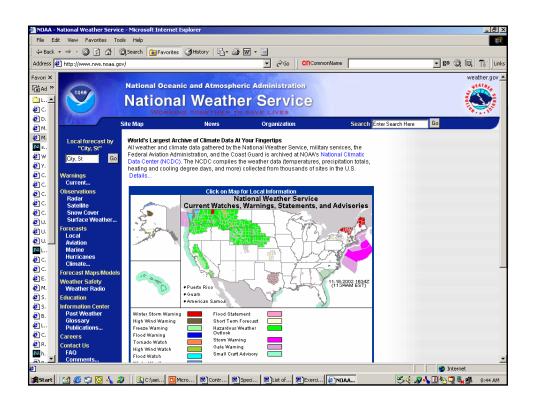


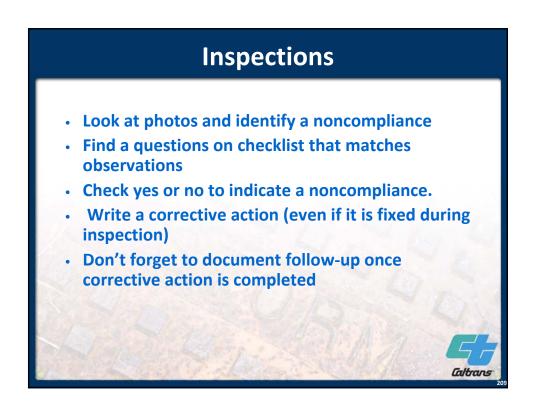
# **Inspections**

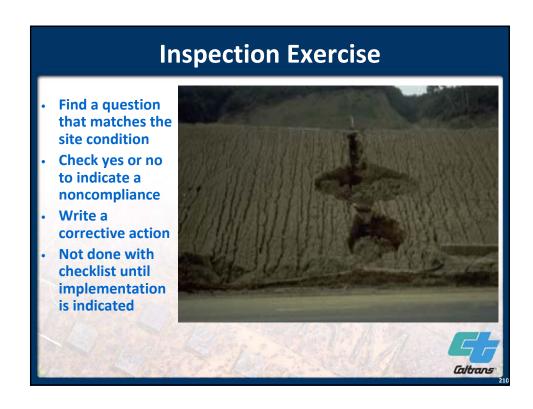
- Are the BMPs implemented in accordance with the Special Provisions and SWPPP?
- Are the required combinations of Soil Stabilization, Sediment Barriers and Desilting Basins installed?
- If a Desilting Basin is required but not feasible, is there an adequate replacement?
- Are the sediment control BMPs available for implementation prior to a predicted rain event?

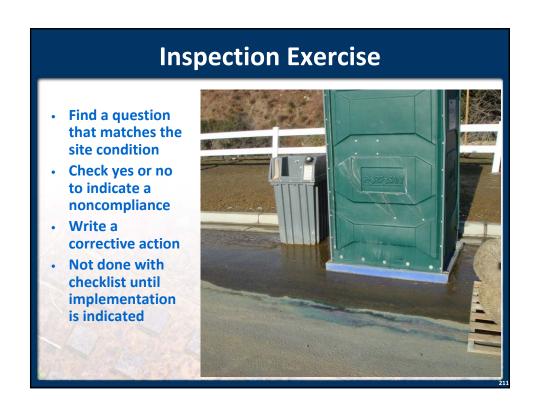












### **Inspection Exercise**

- Find a question that matches the site condition
- Check yes or no to indicate a noncompliance
- Write a corrective action
- Not done with checklist until implementation is indicated



### **Inspection Exercise**

- Find a question that matches the site condition
- Check yes or no to indicate a noncompliance
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### **Inspection Exercise**

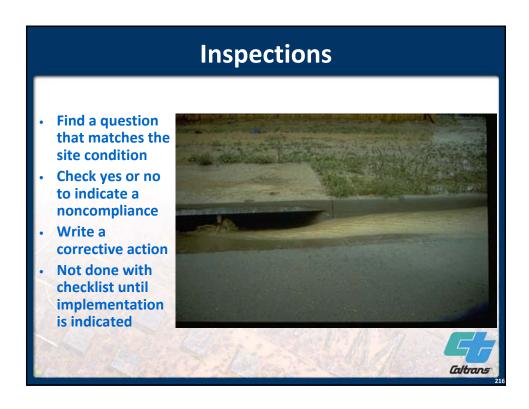
- Find a question that matches the site condition
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### **Inspection Exercise**

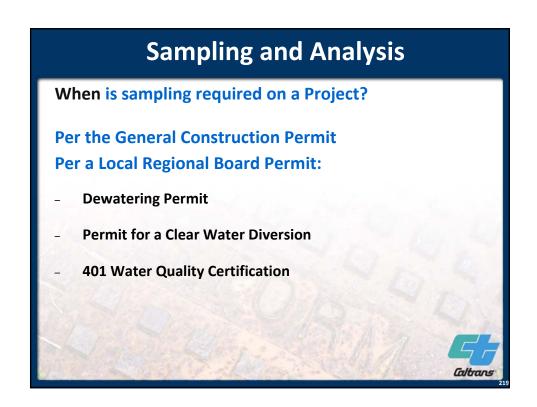
- Find a question that matches the site condition
- Check yes or no to indicate a noncompliance
- Write a corrective action
- Not done with checklist until implementation is indicated











### **Non-Visible Pollutants**

- · Sampling and Analysis is required if...
  - Construction material or wastes are not stored under watertight conditions
  - A spill or breach of containment of pollutants occurs and is not cleaned up prior to rain
  - Site is contaminated by prior use
  - Soil amendments or soil stabilizers have been applied during or within 24 hours preceding a rain event
  - ... and there is the potential for discharge of pollutants to surface waters or drainage system



### Sediment/Silt/Turbidity • Sampling and Analysis is required if... • The construction site discharges directly to listed water body

### **Dewatering Pollutants**

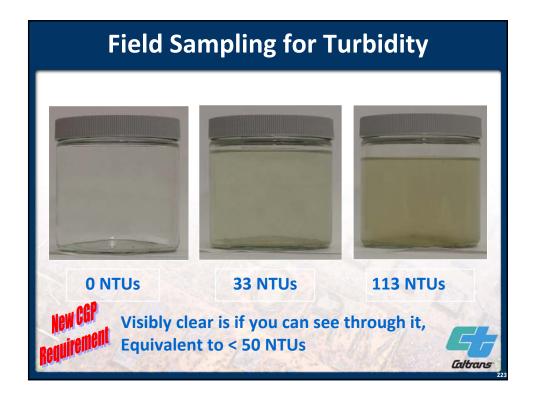
### Sediment

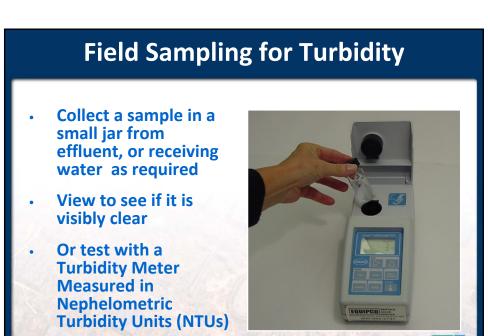
- In some RWQCB jurisdictions, stormwater with sediment only can be discharged under the Caltrans Permit if it is 'visibly clear'. Sampling may not be required.
- Other RWQCBs require a General or a Site Specific Dewatering Permit which will require sampling as specified by that permit

### Other Pollutants

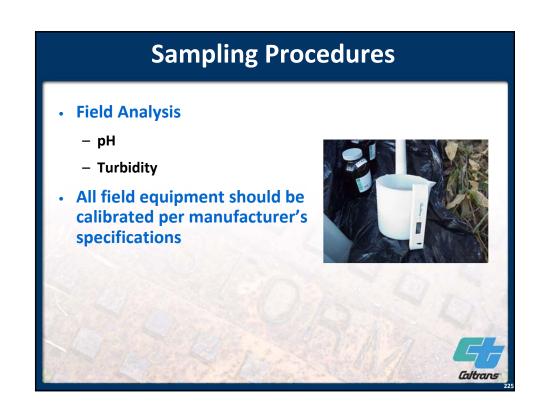
- Sampling as required by RWQCB Permit







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### **Evaluation of Results**

- Data Evaluation
  - The contractor will submit an evaluation of the water quality sample analytical results for every sampling event
  - Should downgradient samples exceed upgradient or background levels, the WPCM will evaluate:
    - BMPs
    - Site Conditions
    - Surrounding influences/other site factors

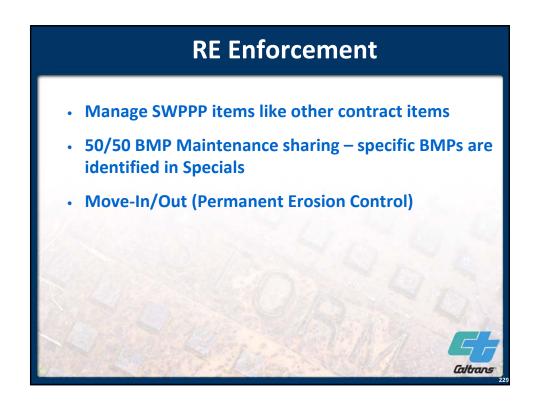


### **Evaluation of Results**

- Data Evaluation (cont.)
  - Contractor will determine probable cause for the increase in levels downgradient
  - Appropriate BMPs will be repaired or modified to mitigate increases/discharges
  - Any revisions to the BMPs will be recorded as an amendment to the SWPPP



## RE Enforcement Verbal warning Written notification Enforcement using the 25% progress payment retention Stop work



### **RE Enforcement**

- Suspending any work that would exacerbate the noncompliance or interfere with or prevent the contractor's efforts to correct the deficiency (Standard Specifications 8-1.05)
- Withholding funds from contract progress payments as specified in the contract (Special Provisions 10-1)

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### **RE Enforcement**

- Hold contractor responsible for all costs and liabilities resulting from a failure to comply with Water Pollution Control special provisions (Special Provisions 10-1)
- Discharge any subcontractor or person employed by contractor who Caltrans deems to be incompetent or who acts in a disorderly or improper manner (Standard Specifications 5-1.12)



### **RE Enforcement**

- Assess liquidated damages including passing along fines for permit violations (Standard Specifications 8-1.07)
- Bring in a separate contractor or Caltrans
   Maintenance to complete the work (Standard
   Specifications 8-1.08)
- Initiate termination of the contract (Standard Specifications 8-1.11)



### **Local Agency Project Sanctions**

- Encroachment Permits
   (Oversight Projects Generally <\$1,000,000):</li>
  - Caltrans has right to revoke permit for violation of the encroachment permit conditions
  - Without an encroachment permit, local agency and contractor are required to suspend all work on site
  - Additional bonding, deposit of additional funds, and additional fees may be required to reissue permit



### **Local Agency Project Sanctions**

- Cooperative Agreement (Oversight Projects Generally >\$1,000,000):
  - If the Local Agency does not comply with the encroachment permit, they can be required to return the site to original condition or to a condition of acceptable permanent operation
  - Caltrans can take over a project and complete it or place Project in satisfactory permanent operation condition, then be reimbursed with gas tax funds that were due the local agency
  - State retains authority to discontinue services of any personnel considered to be unqualified

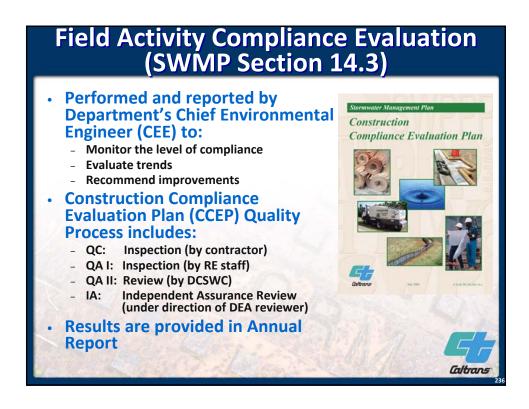


### **Local Agency Project Sanctions**

- Other Possible Sanctions by Caltrans Include:
  - Freeze the programming of federal or state funds
  - Freeze progress payments for a federal-aid project
  - Withdrawal of all or part of Federal or State funds

Failure to correct the deficiencies in a timely manner shall be grounds for imposing additional sanctions







### **Notice of Discharge**

- **Applicable Discharges:** 
  - Stormwater from a DSA discharged to a waterway without treatment by a BMP
  - Stormwater discharged to waterway or storm drain system where control measures have been overwhelmed or not properly maintained or installed
  - Prohibited non-stormwater or hazardous substance discharges/spills
  - Where water quality samples indicate elevated sediment or nonvisible pollutants
  - Others as directed by RE



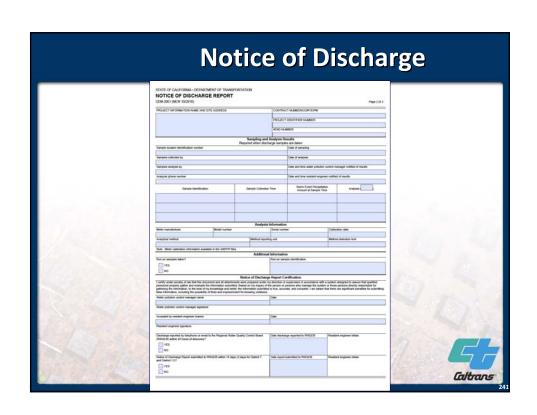


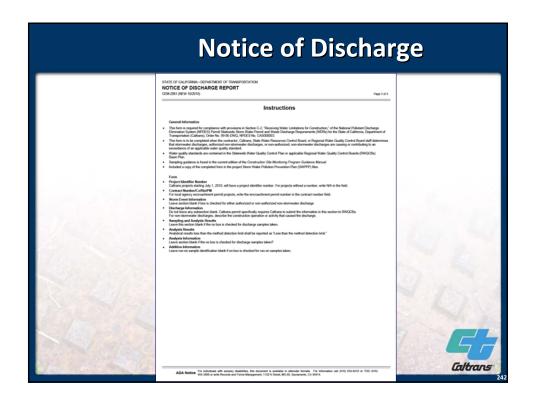
### **Notice of Discharge**

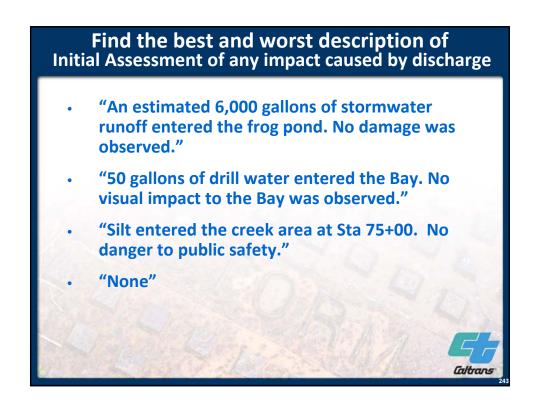
- If any pollutants are discharged into the waters of the state, notify the CSWC immediately
- Review Caltrans Permit to determine the appropriate reporting timeframe, and provide a draft report of noncompliance to the CSWC
- The CSWC will then forward the report to the RWQCB



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### Find the best and worst description of Existing BMPs in place prior to discharge

- "Air testing of tubes was conducted prior to grouting operation. Crew was in the area to watch for any leaks."
- "Silt fence, straw, waddles, temporary cover, drainage inlet protection (rock bags), and street sweeping"
- "Drilling plan, which includes BMP NS-13 "Material and Equipment use Over Water" was being followed when the incident occurred. The drill water is contained in the piles and weir barge using a sealed system."
- "N/A"



### Find the best and worst description of Date of Deployment and Type of BMPs after Discharge

- "No additional BMPs were deployed."
- "1-7-08 @ 2:30PM: Water Pollution Control Manager and site Superintendent scheduled dispatch of two crews to clean and repair area of silt fence damage."
- Feb 4-8, 2008, Added extra silt fence, extra straw waddles and maintained drainage inlet protection. Furthermore, operated street sweeper twice a day to remove accumulated sediment in the street that resulted from pile driving operations at that location."
- "N/A"



### Find the best and worst description of Steps taken or planned to reduce recurrence of discharge

- "A larger pump will be introduced into the North Gate Sump to intercept the larger flows in order for the sump to not be overwhelmed. During forecasted large rain events a 6" diesel pump will be in place at the north gate to help with increased flows until a larger pump is installed in the sump."
- "Attendant will watch filling of water tanks."
- "Once discharge area is re-stabilized, crews will clean out rock slope protection ED 23-d @ 74+60 and 900 mm CSP culvert 23-b at 74+70 and place additional check dams along subgrade choker between 72+00 and 74+00. This will prevent sediment transport to the area of discharge so that the new BMPs will not be overwhelmed by future rain events. This area will be monitored with additional emphasis prior to, during, and after future storms."

### Find the best and worst description of Implementation and maintenance schedule for any affected BMPs

- "SWPPP maintenance will be continued for any additional sediment buildup around BMPs and any onsite storm water collection points."
- "Enhancement and maintenance of all BMPs in the vicinity will continue through the course of bridge construction over the next 4 months."
- "N/A"
- "1-8-08 to 1-9-08 Clean silt from BMPs and repair silt fence in area of discharge.

1-10-08 to 1-11-08 Clean culver and install more frequently spaced check dams along subgrade choker from Station 72+00 to 74+00."

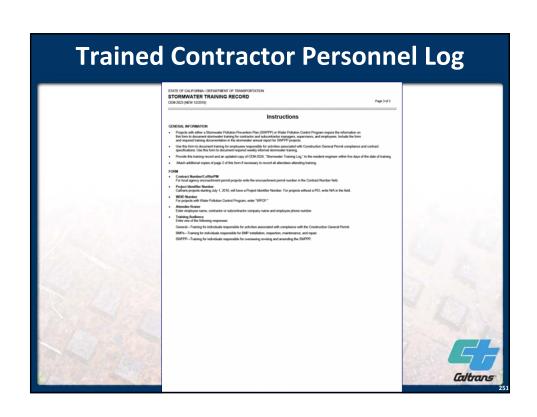


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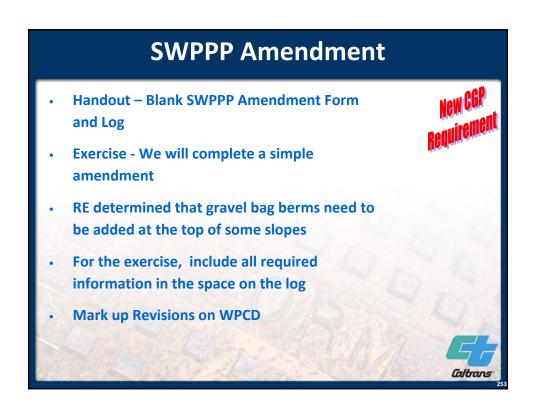








# Annual Certification of Compliance Make sure that the contractor completes and certifies the annual compliance certification form (CEM-2070) of the SWPPP and submits it to the RE by July 15 The RE then signs and certifies the same form and gives a copy back to the Contractor for the SWPPP File a copy in Category 20



### **SWPPP** Amendment

### The amendment requires:

- Who requested the change
- Location of the proposed change
- Reason for change
- Original BMPs before change, if any
- New BMPs after amendment

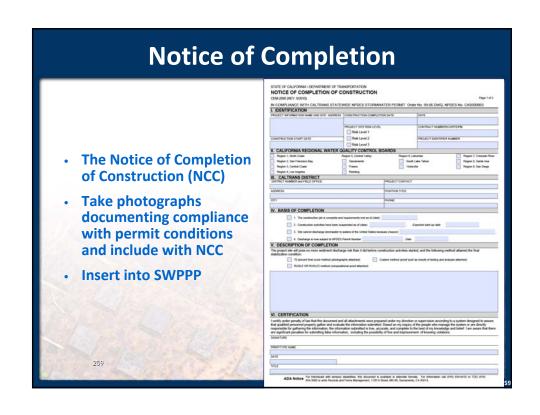


## Category 20 files - SWPPP/WPCP - Amendments - Annual certification - Contractor inspection reports - Caltrans inspection reports - Correspondence with the contractor - DCSWC CCEP (QAII) inspection reports - Correspondence with regulatory agencies





## NPDES permit requirements Construction must be completed and permanent erosion control must be in place and functional Erosion control is considered functional when a uniform vegetative cover equivalent to 70 percent of the native background vegetation coverage has been established or equivalent stabilization measures have been employed Submit NCC



### **Until NCC or NOT is Submitted**

- The SWPPP must remain on site during working hours
- Site inspections continue prior to, during, and after storm events
- The July 15 Annual Certification of Compliance
- Notice of Discharge reporting

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### **Retain Records for 3 Years**

- Approved SWPPP documents and amendments
- Records of all inspections
- Compliance certifications
- Notification of Construction
- Notice of Discharge reporting
- · NCC/NOI



### Level II – Post-Test

- Take test when you return to office
- Same test given at the start of the course to evaluate what you learned
- Results will be used to evaluate the effectiveness of this training

